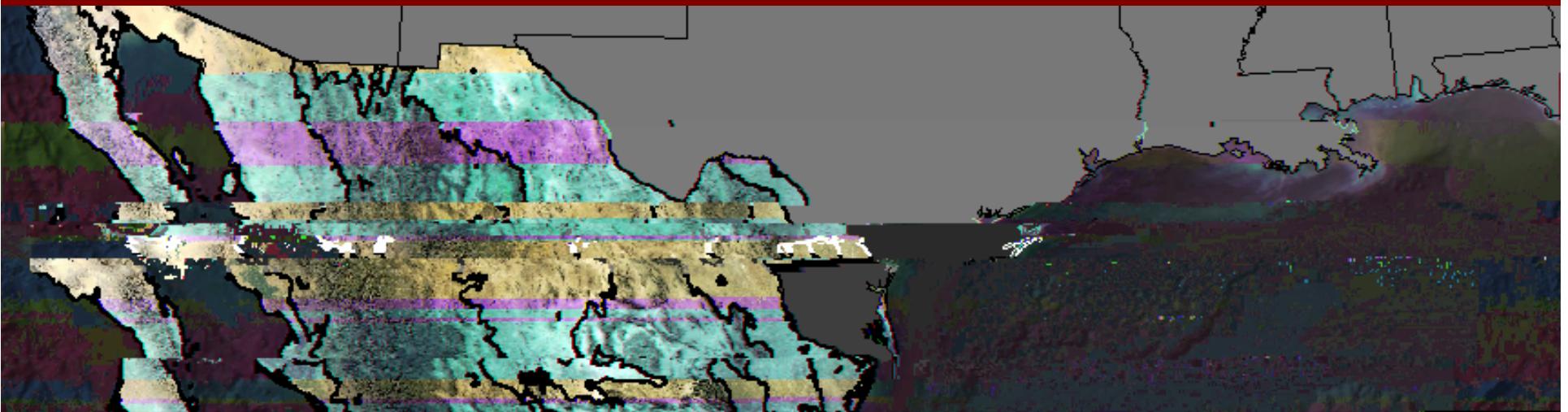
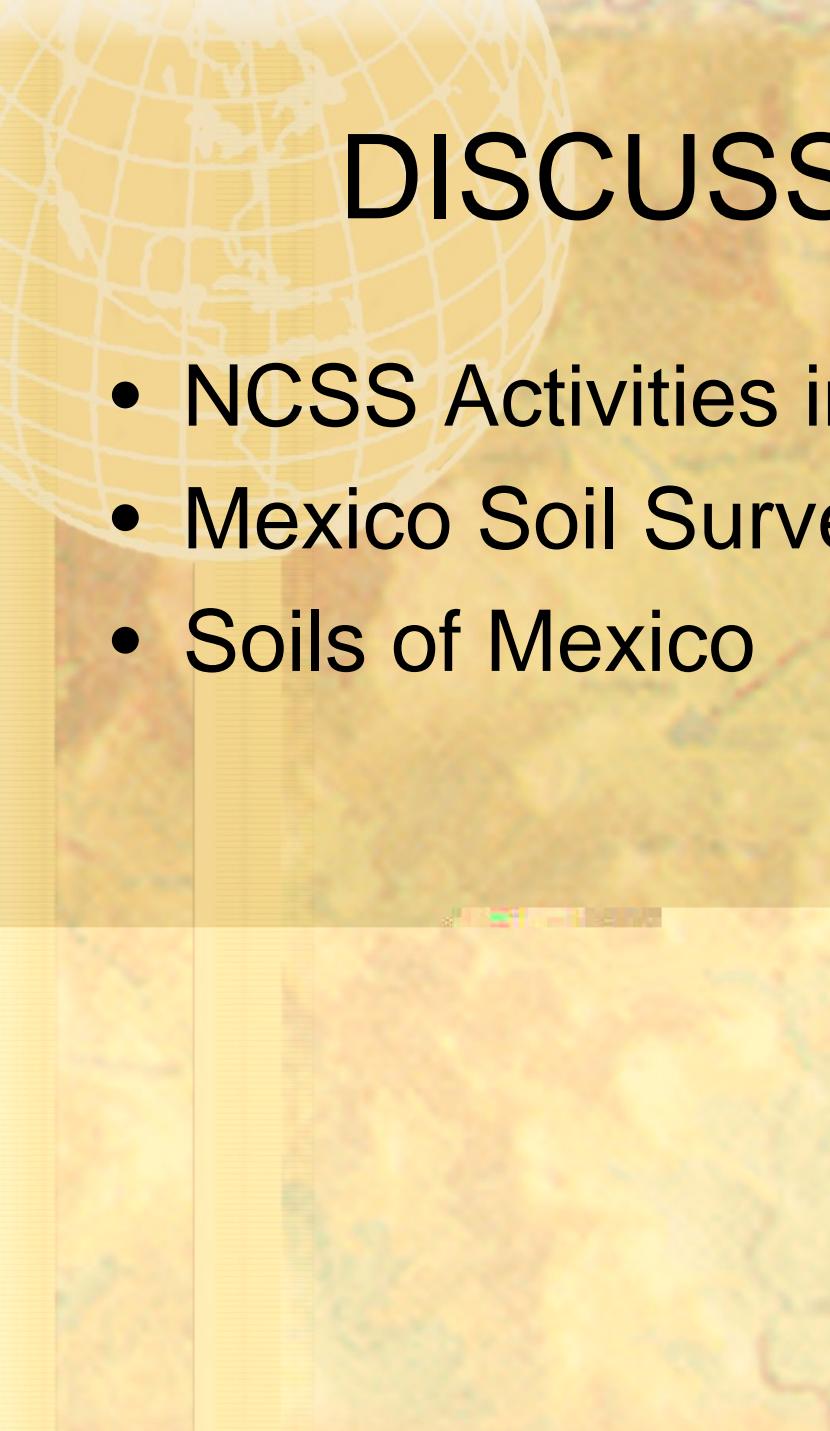


SOILS OF MEXICO



**Luis A. Hernandez
USDA-NRCS
MO Leader/State Soil Scientist
Little Rock, AR**



DISCUSSION TOPICS:

- NCSS Activities in Mexico
- Mexico Soil Survey Program
- Soils of Mexico



NCSS Activities in Mexico

- Technology Transfer & Training
 - Soil Classification



Departamento de Agricultura de los Estados Unidos
Servicio de Conservación de Recursos Naturales



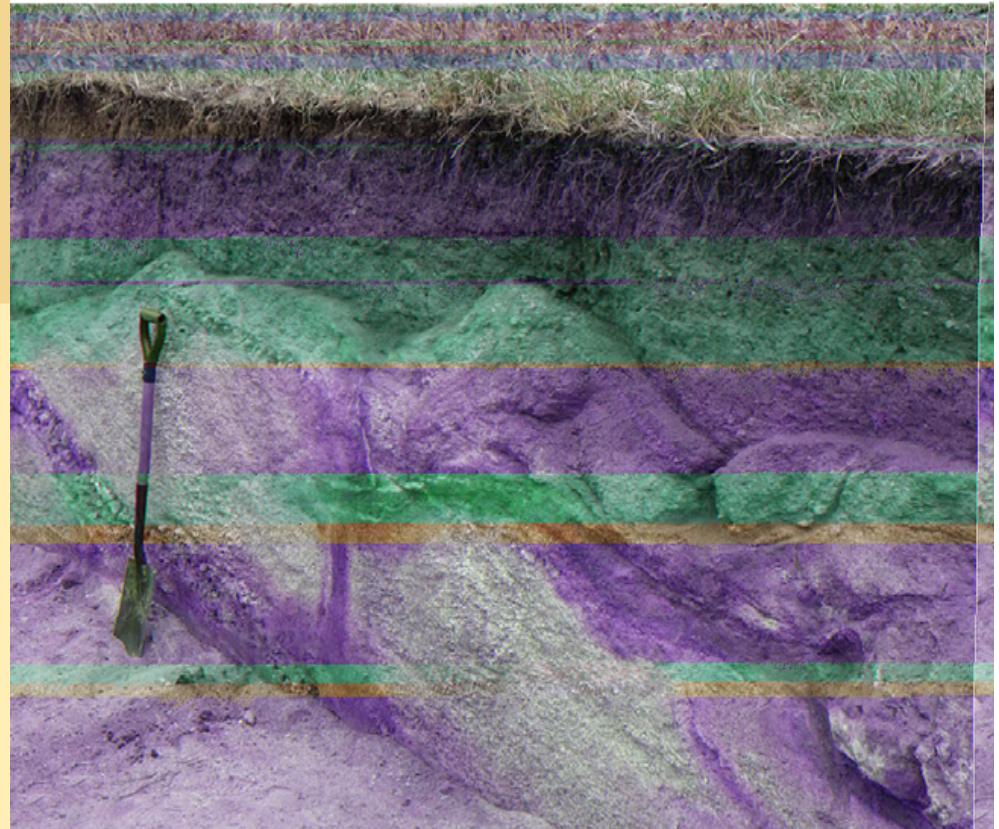
Keys to Soil Taxonomy Spanish Translation

Available online at:

[http://soils.usda.gov/technical/
classification/tax_keys/](http://soils.usda.gov/technical/classification/tax_keys/)

Claves para la Taxonomía de Suelos

Décima Edición, 2006

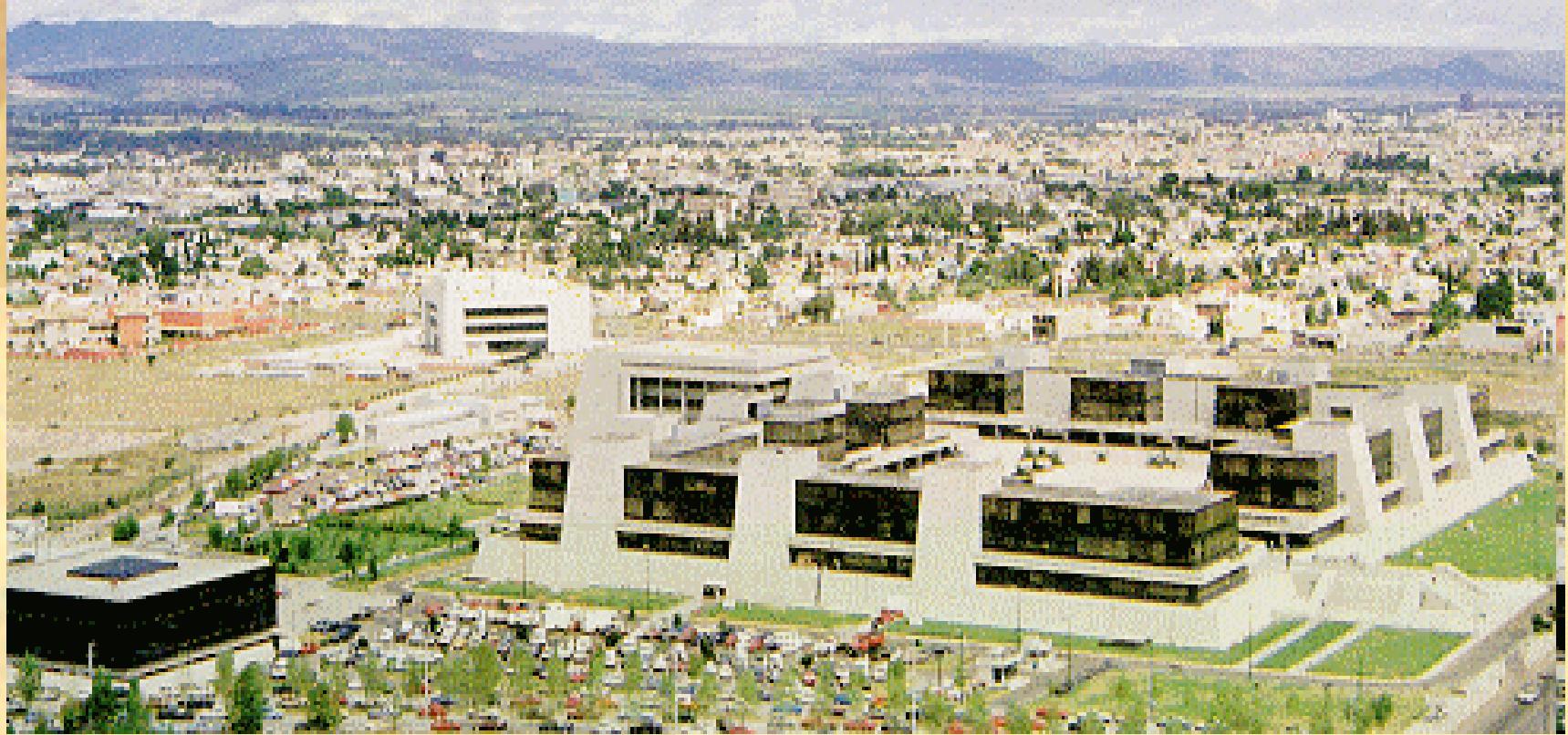




Universities & Institutions

- Universidad Nacional Autonoma de Mexico, Mexico City
- Universidad Michoacana de San Nicolas de Hidalgo, Morelia
- Universidad Autonoma de Tlaxcala
- Universidad Juarez Autonoma de Tabasco
- Universidad Autonoma de San Luis Potosi
- Colegio de Post-Graduados, Chapingo & Tabasco Campus
- Instituto Nacional de Estadistica, Geografia e Informatica (INEGI), Aguascalientes

MEXICO SOIL SURVEY PROGRAM



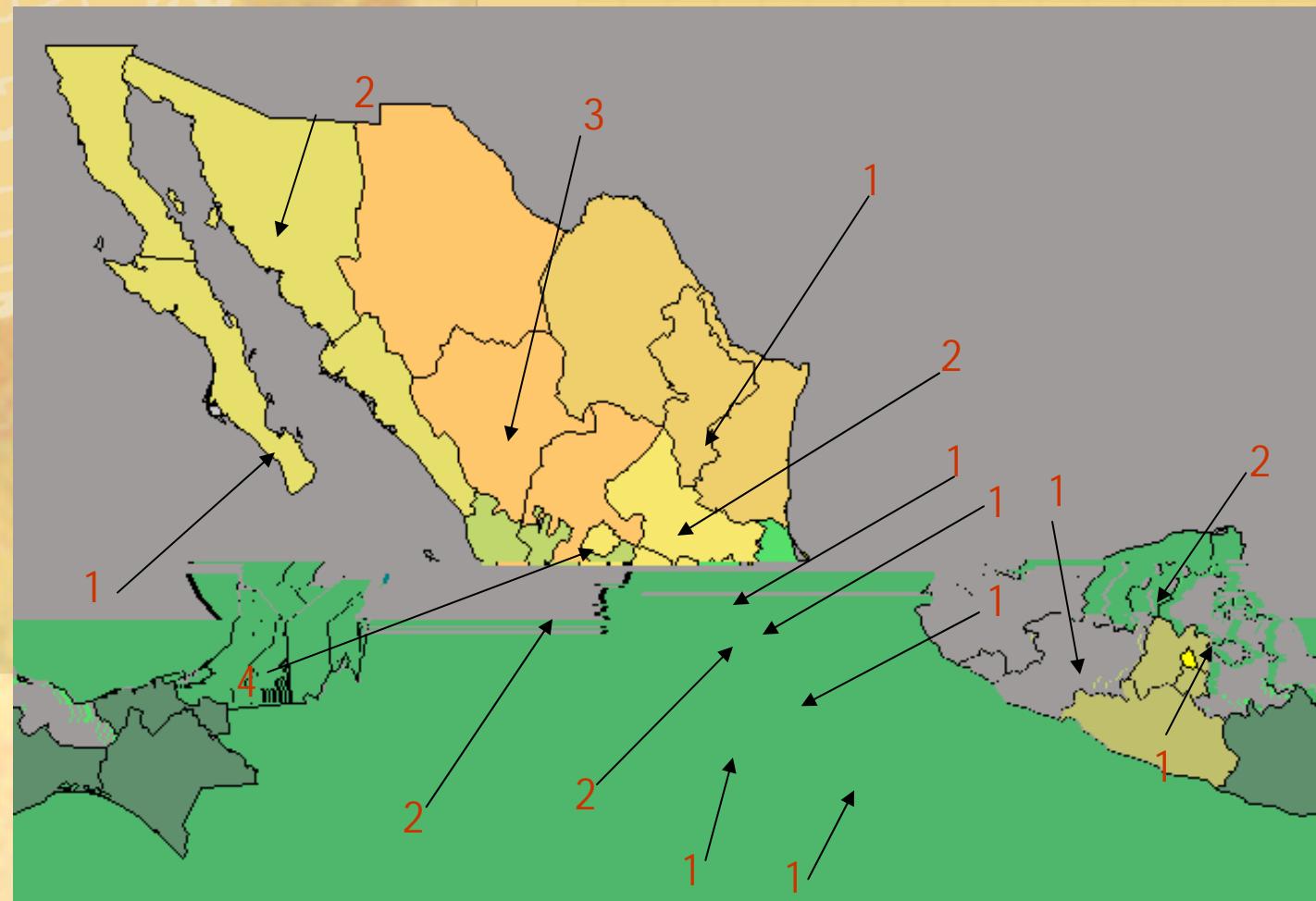
LAND RESOURCE REGIONS - 15



MAJOR LAND RESOURCE AREAS - 84



DISTRIBUTION OF SOIL SCIENTISTS

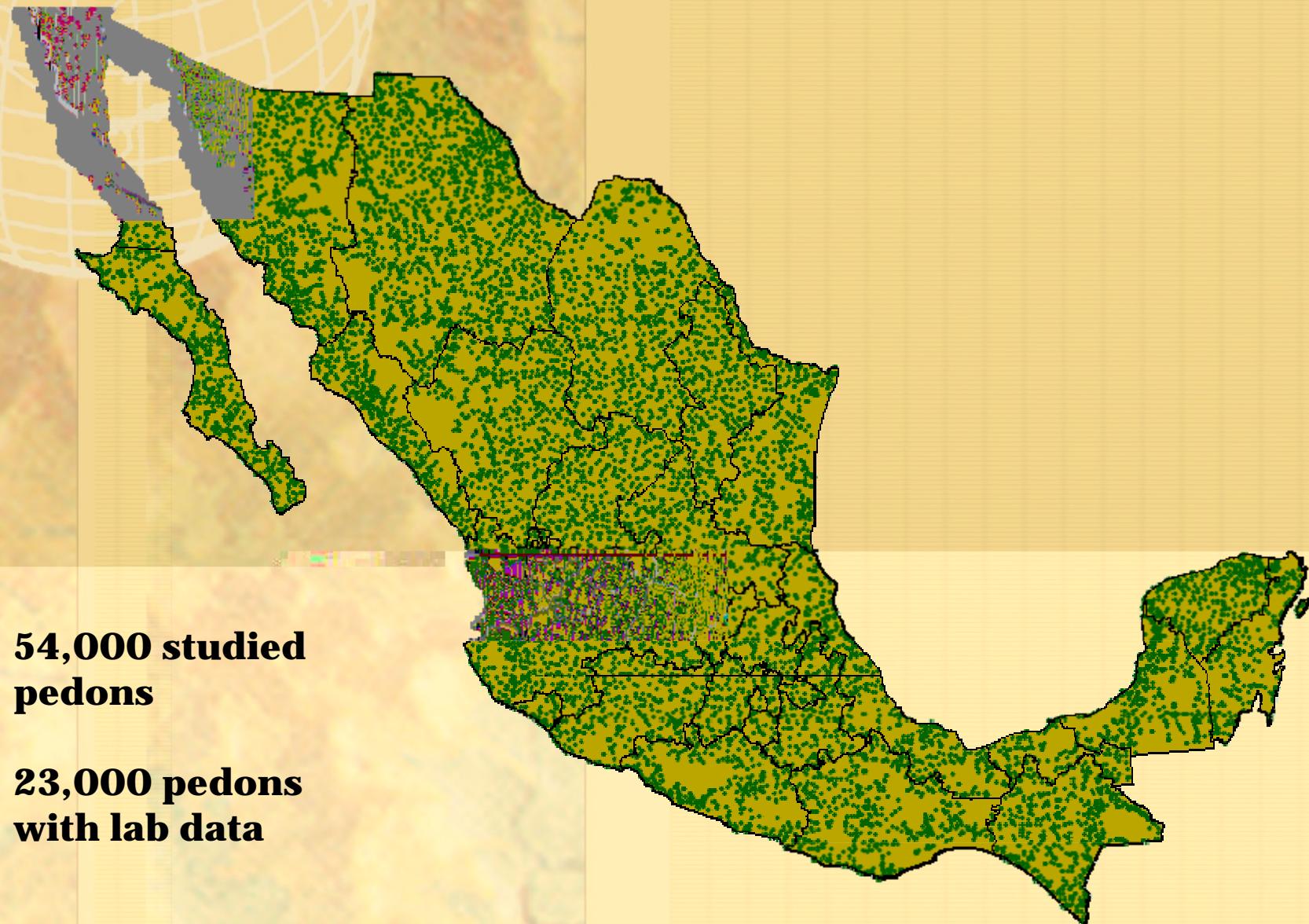


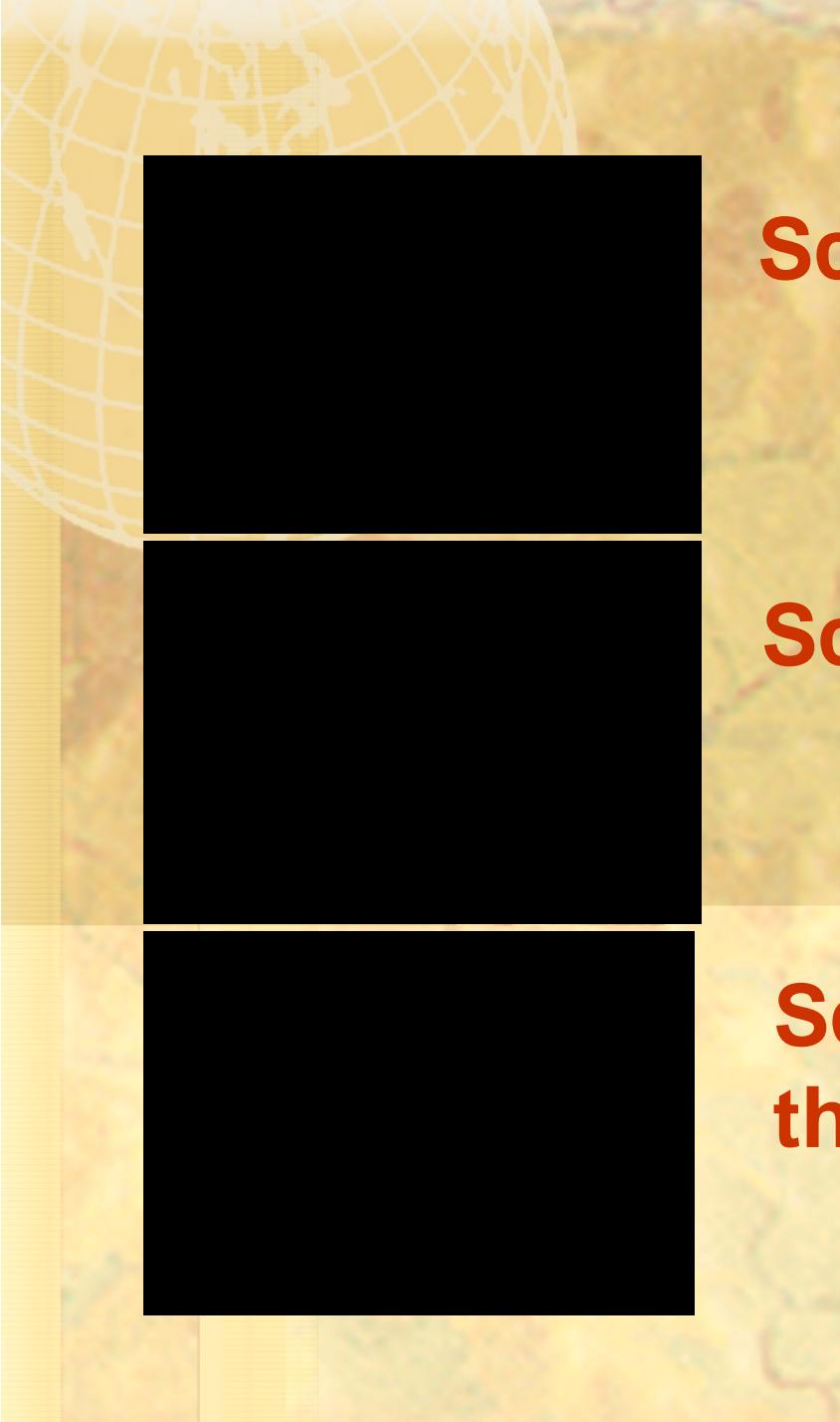
26 Field Soil Scientists

SOIL DESCRIPTION, SAMPLING & ANALYSIS



Characterization Data



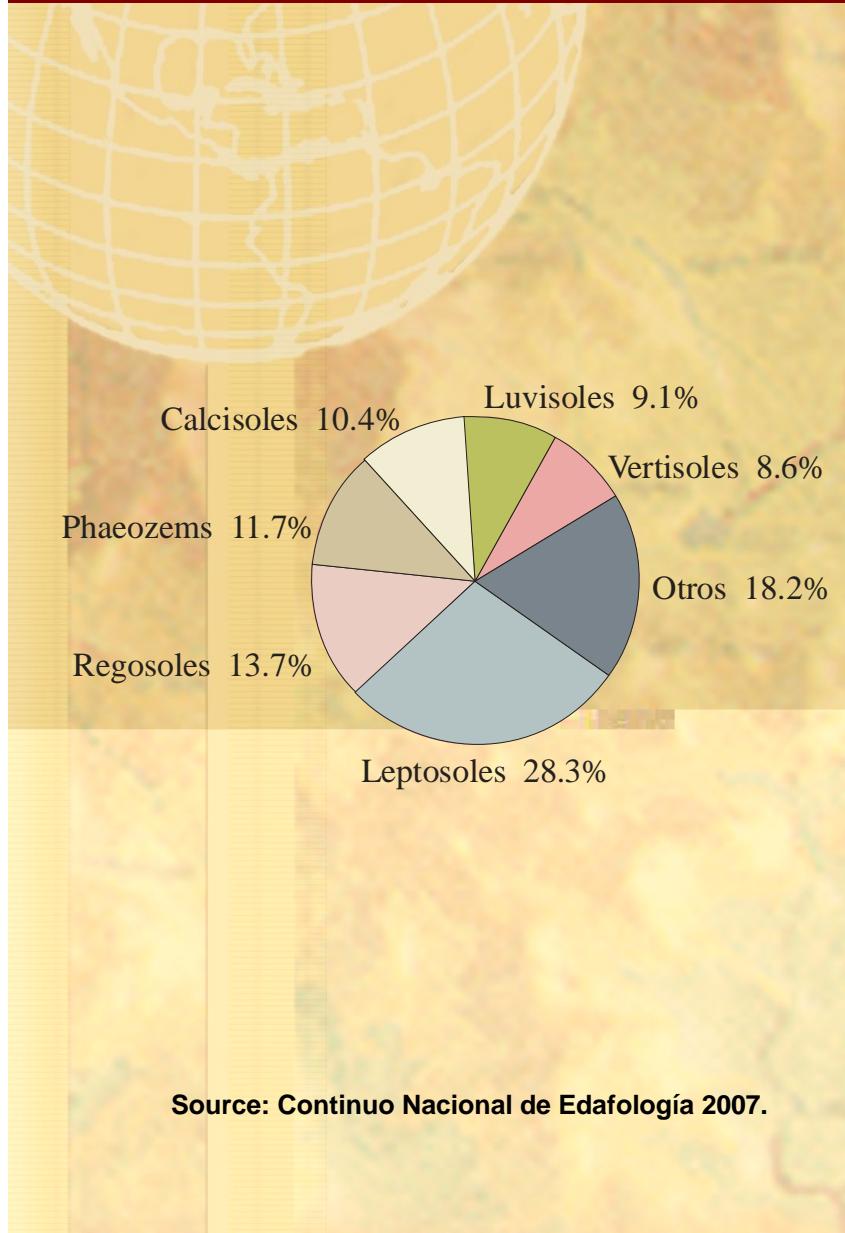


Scale at 1:1,000,000

Scale at 1:250,000

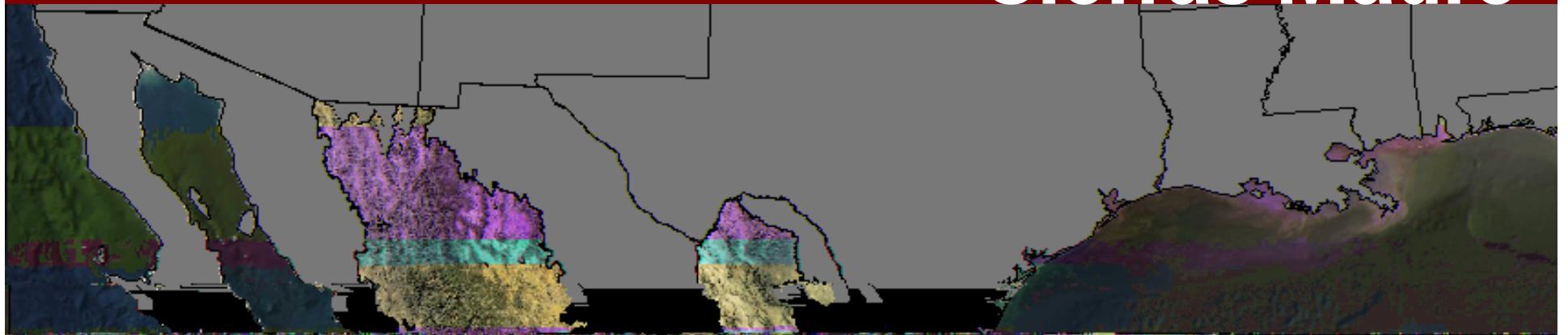
**Scale at 1:50,000 (32% of
the territory)**

DOMINANT SOIL GROUPS - WRB



Name	Area (km ²)	Area (%)
Leptosoles	542994.6	28.32
Regosoles	262806.7	13.70
Phaeozems	224789.0	11.72
Calcisoles	199114.8	10.38
Luvisoles	173778.6	9.06
Vertisoles	165069.3	8.61
Cambisoles	81547.5	4.25
Arenosoles	35453.0	1.85
Solonchaks	34940.4	1.82
Kastañozems	33543.2	1.75
Gleysoles	28169.4	1.47
Fluvisoles	25384.7	1.32
Chernozems	24655.4	1.29
Andosoles	24241.6	1.26
Umbrisoles	13663.0	0.71
Durisoles	10977.6	0.57
Acrisoles	9628.9	0.50
Planosoles	8234.0	0.43
Solonetz	8114.8	0.42
Gypsisoles	5587.1	0.29
Nitosoles	2730.4	0.14
Lixisoles	1070.2	0.06
Histosoles	910.0	0.05
Ferralsoles	225.0	0.01
Plintosoles	61.1	0.00
Antrosoles	4.87	0.00
Total	1917690.4	100.00

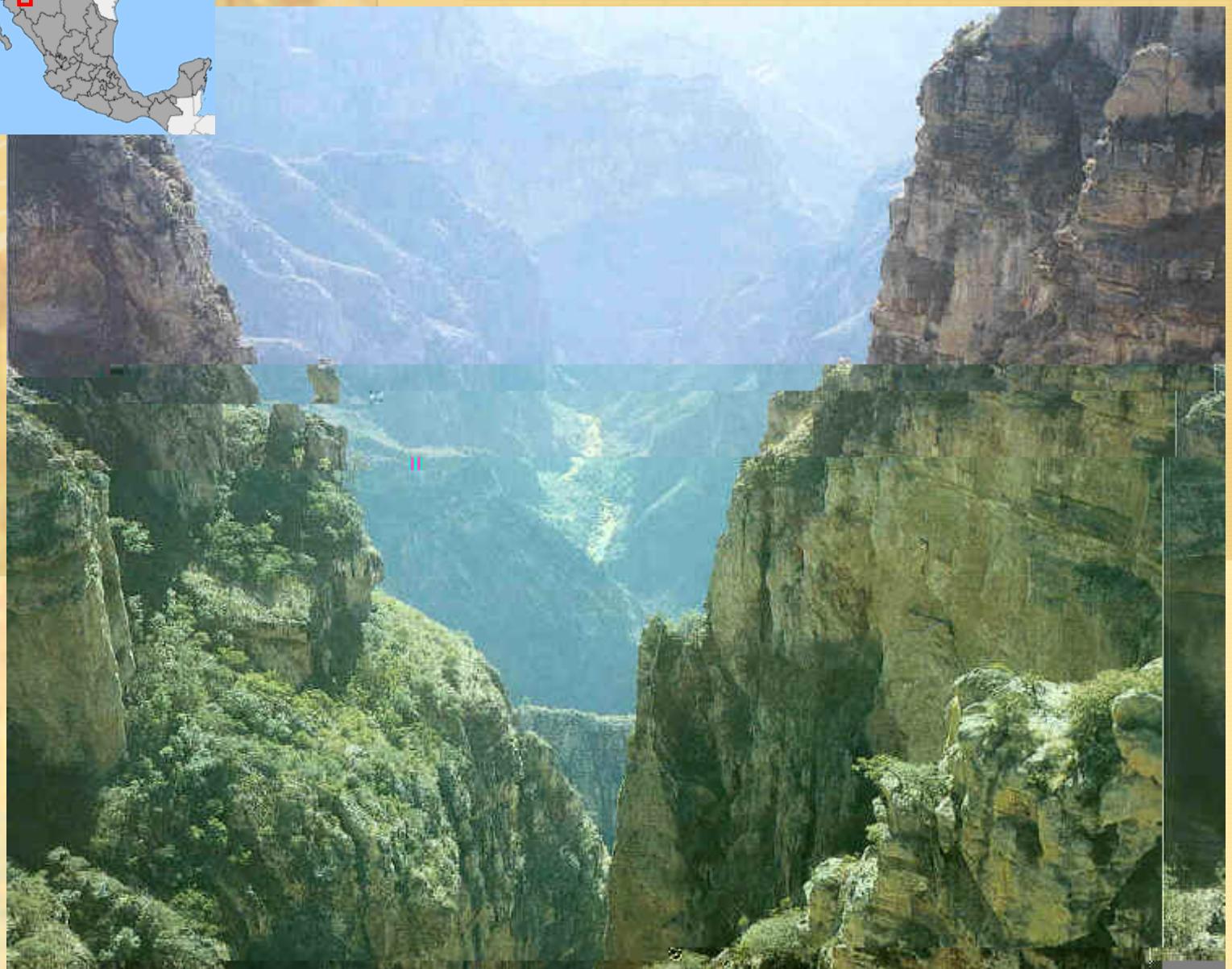
Sierras Madre



Leptosoles (very shallow to bedrock)



**28.3% of the
national
territory**



Regosoles (Entisols)

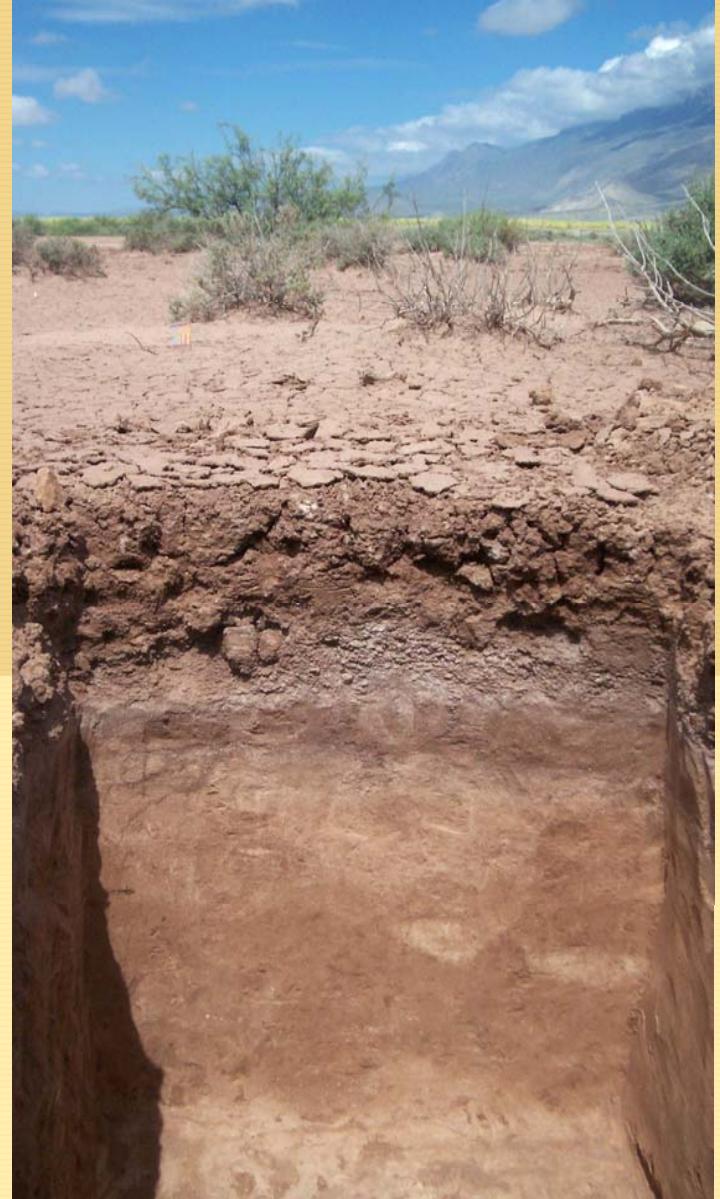


**13.7% of the
national
territory**

Solonetz (Natic Horizon)



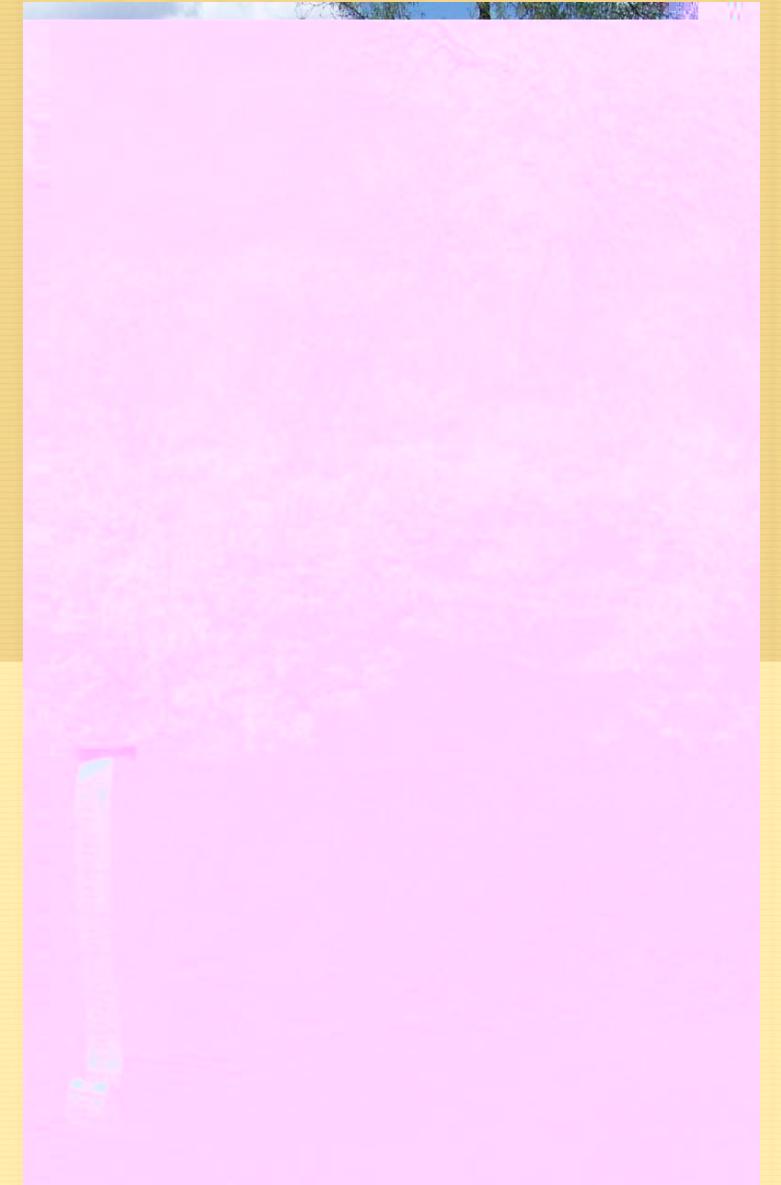
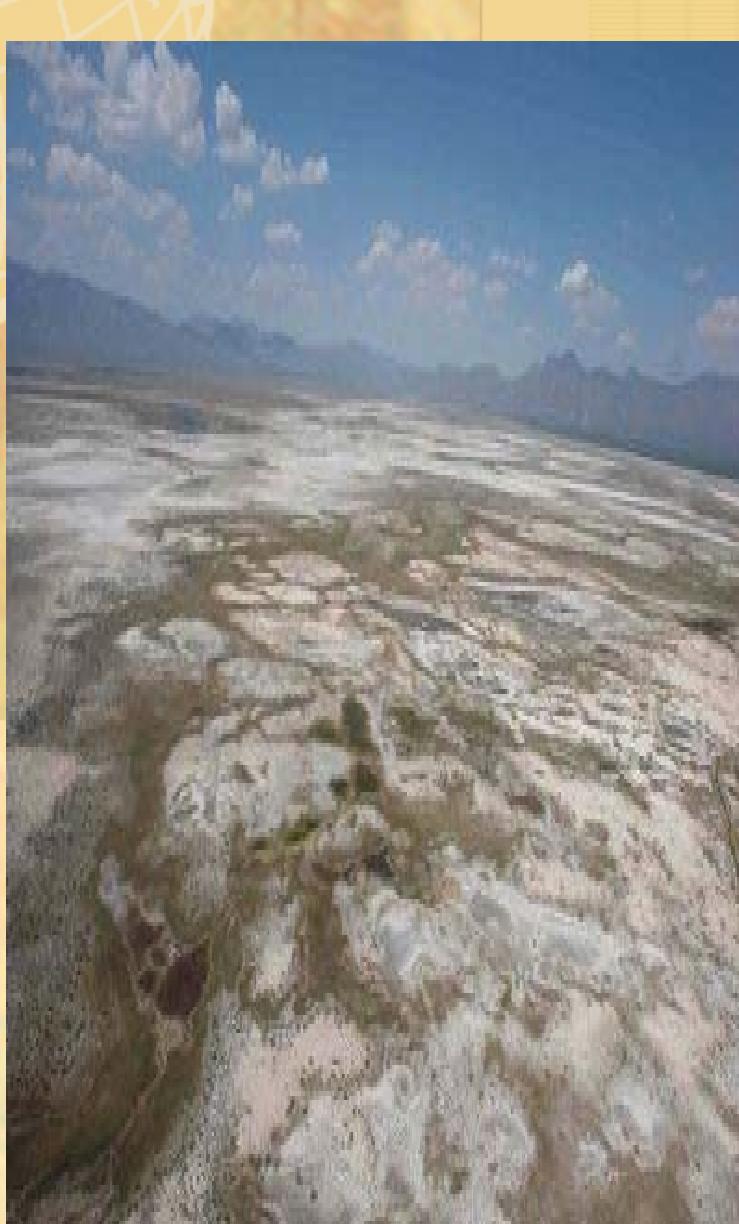
0.42% of
the
national
territory



Gypsisoles

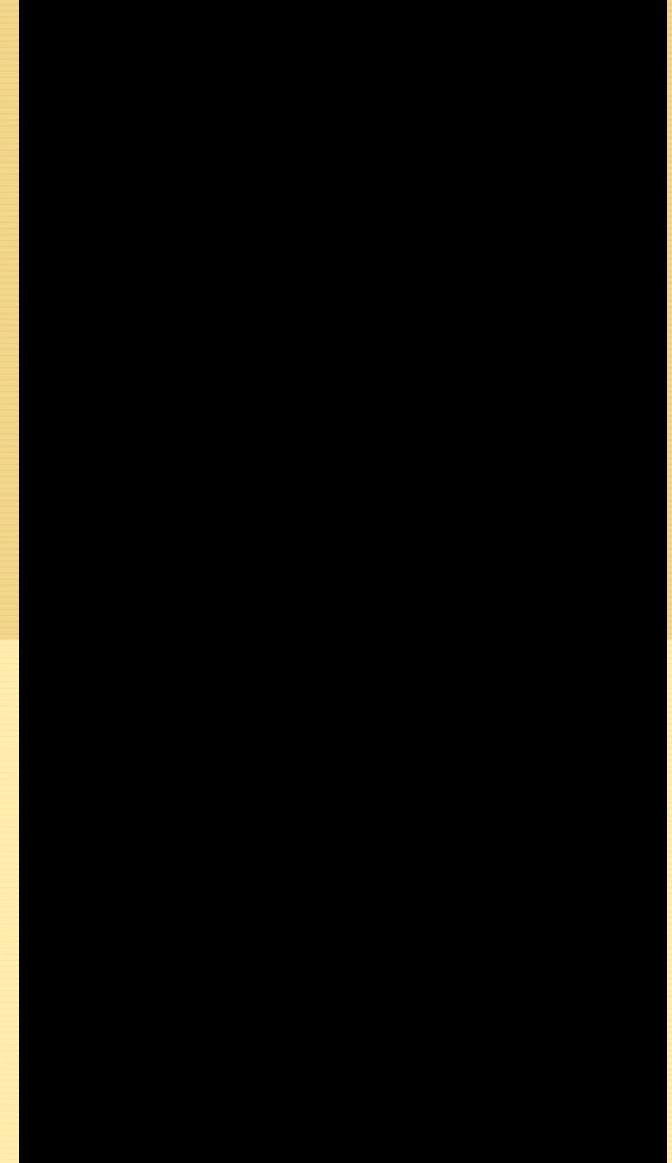
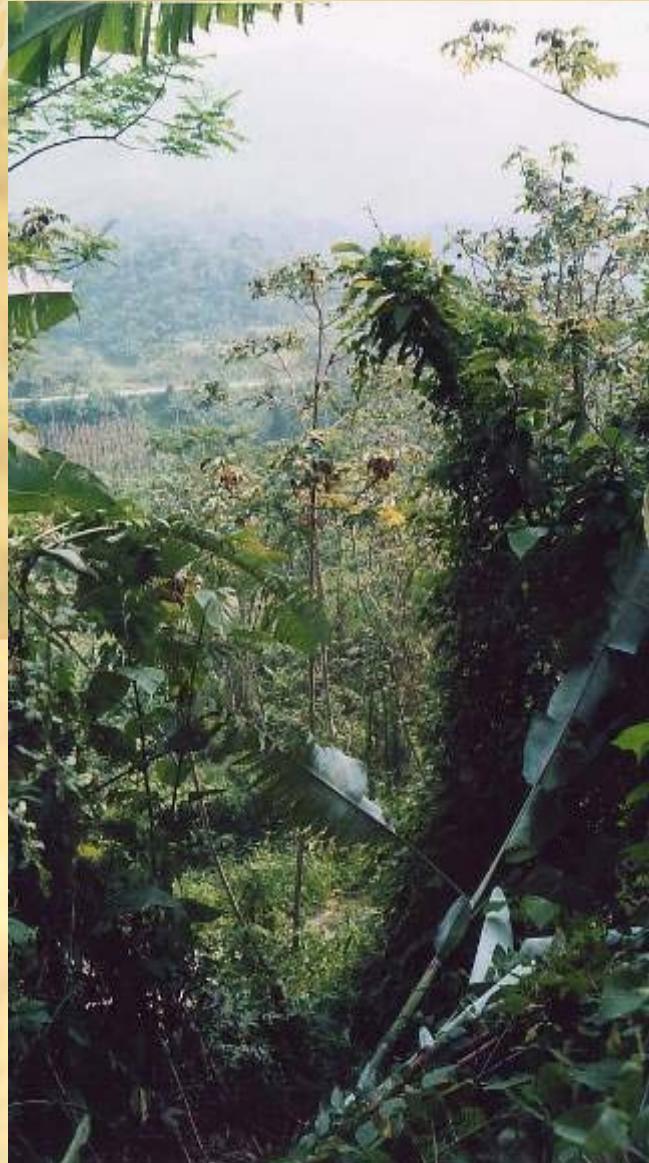


**0.29% of
the
national
territory**

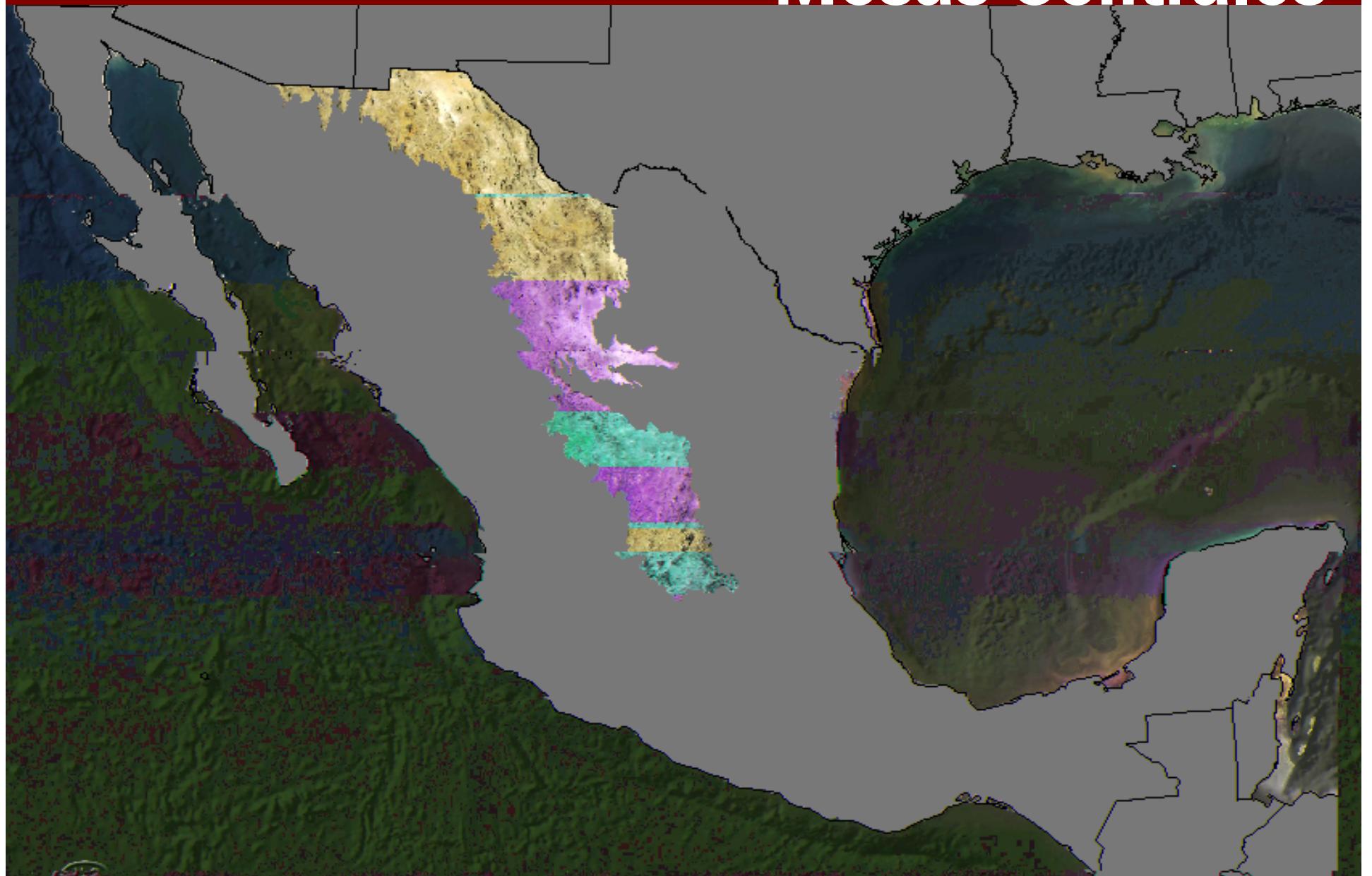


Luvisoles (Alfisols)

9.06% of the
national
territory



Mesas Centrales



Calcisoles (Aridisols)



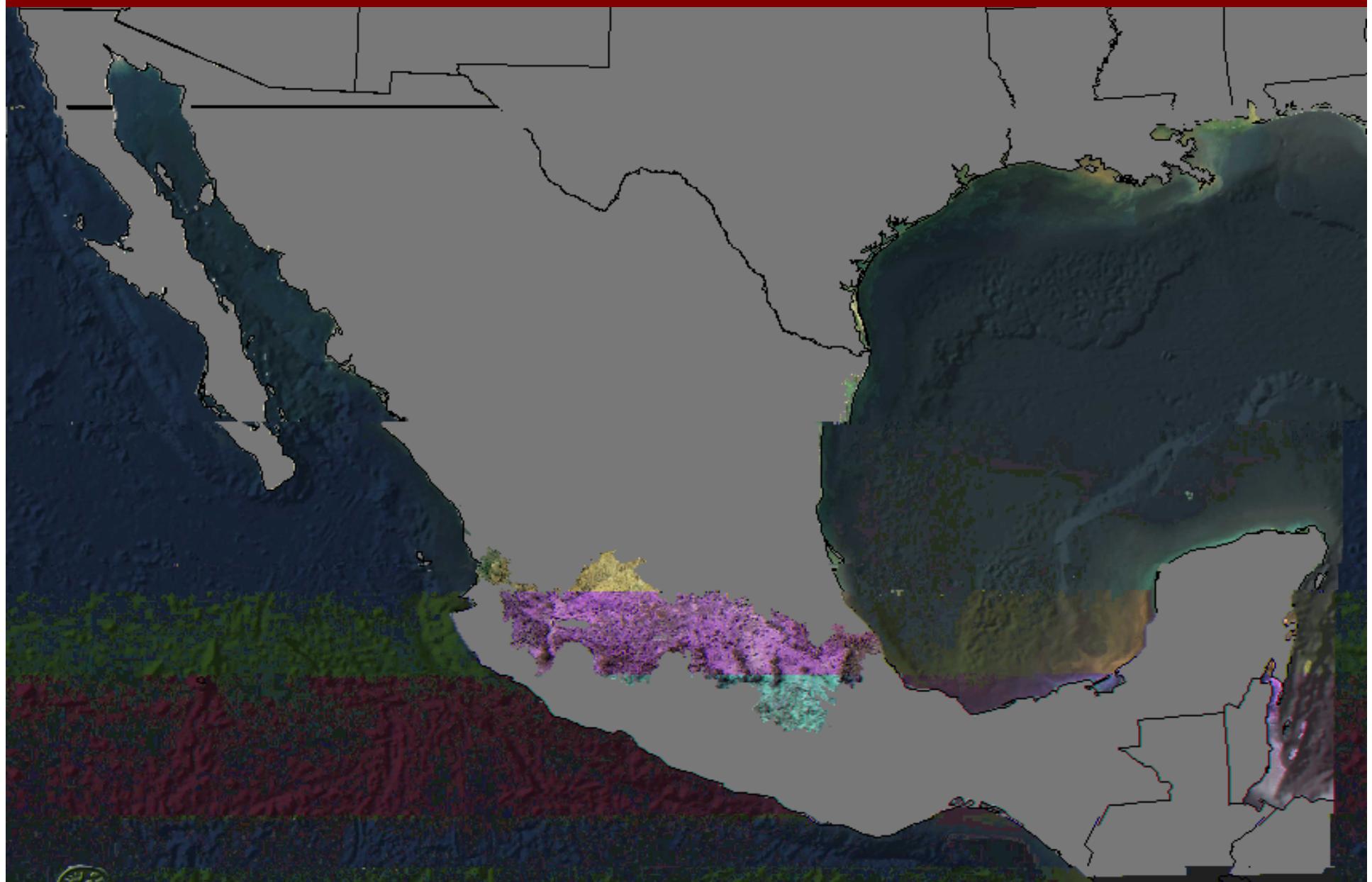
**10.38% of the
national
territory**



Durisoles (Aridisols)

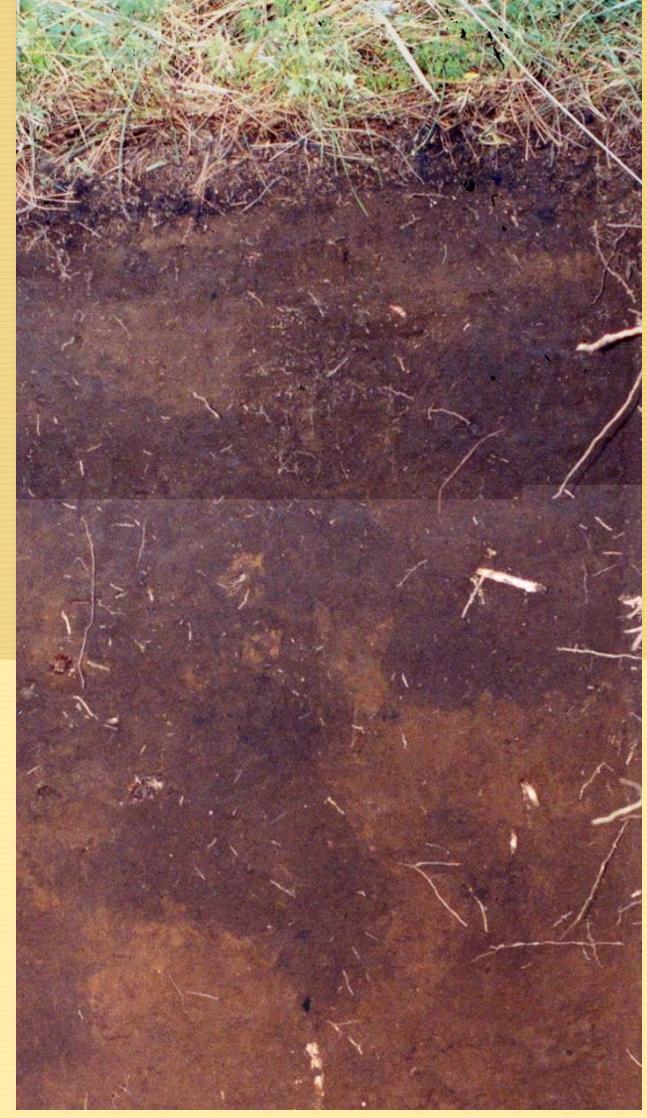
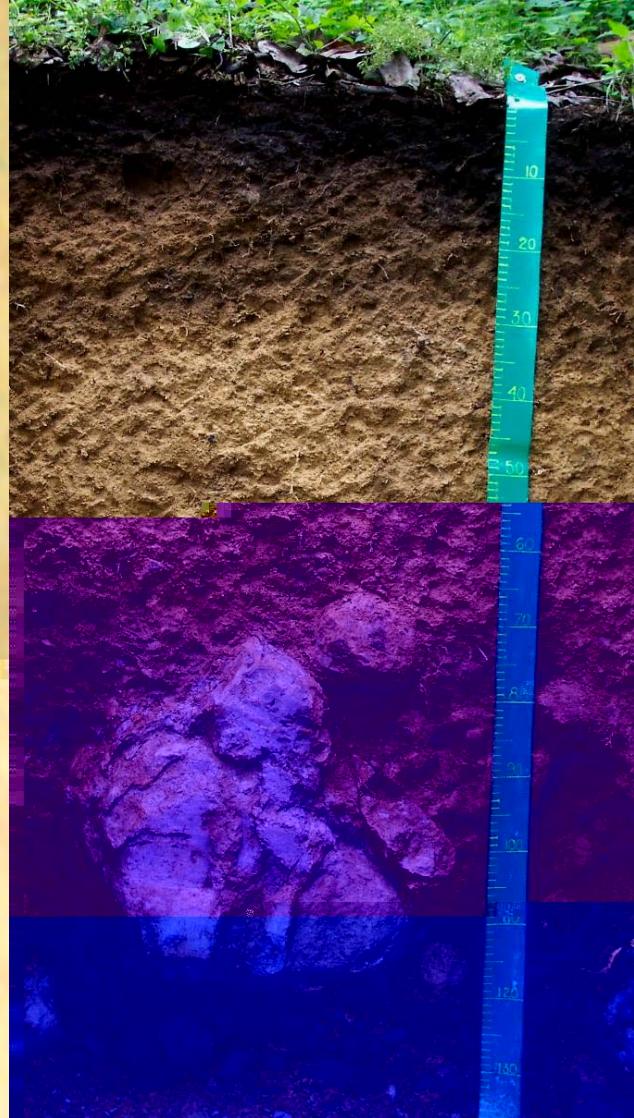
**0.57% of the
national
territory**

Volcanic Region

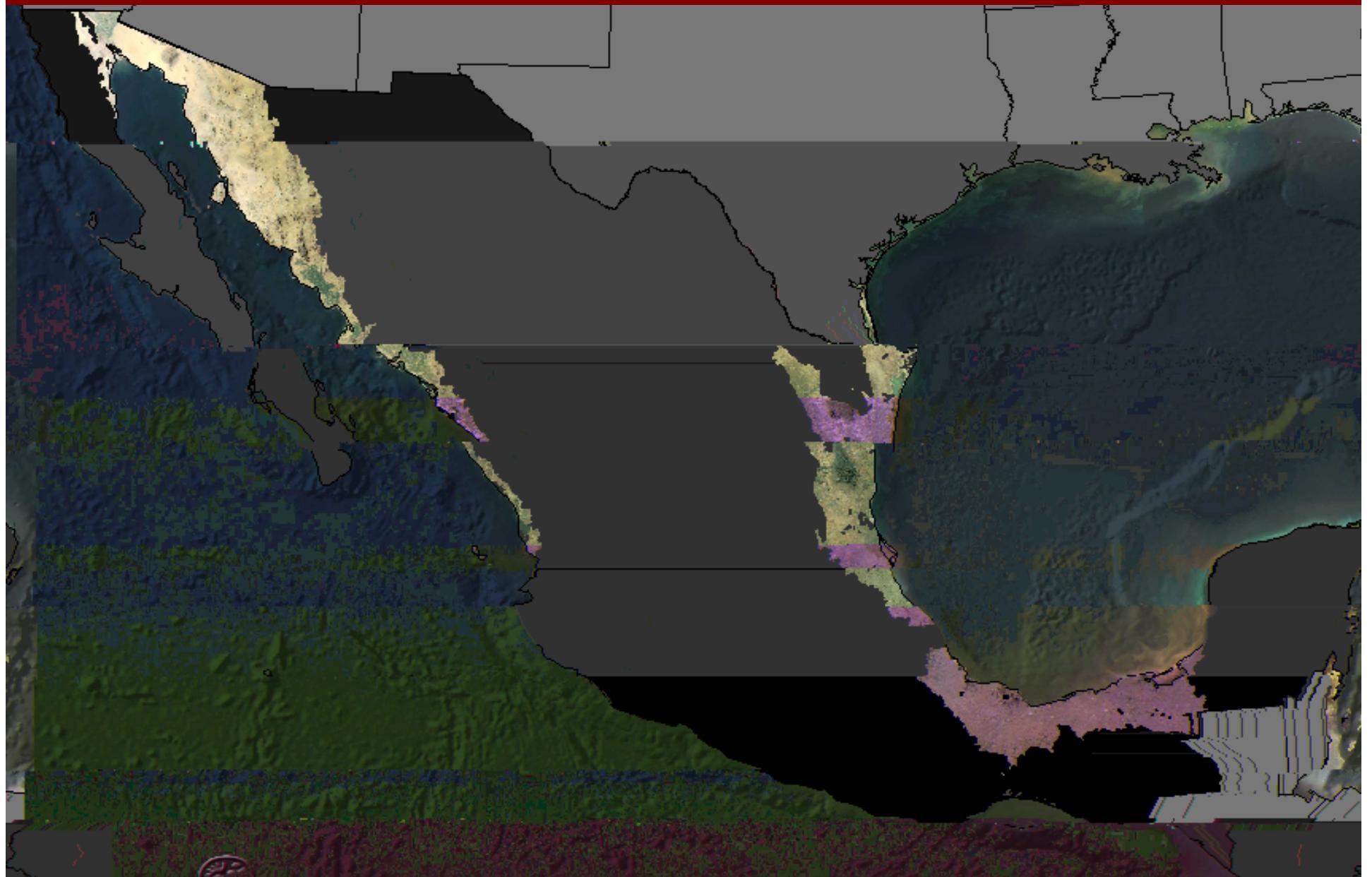


Andosoles (Andisols)

1.26% of the
national
territory



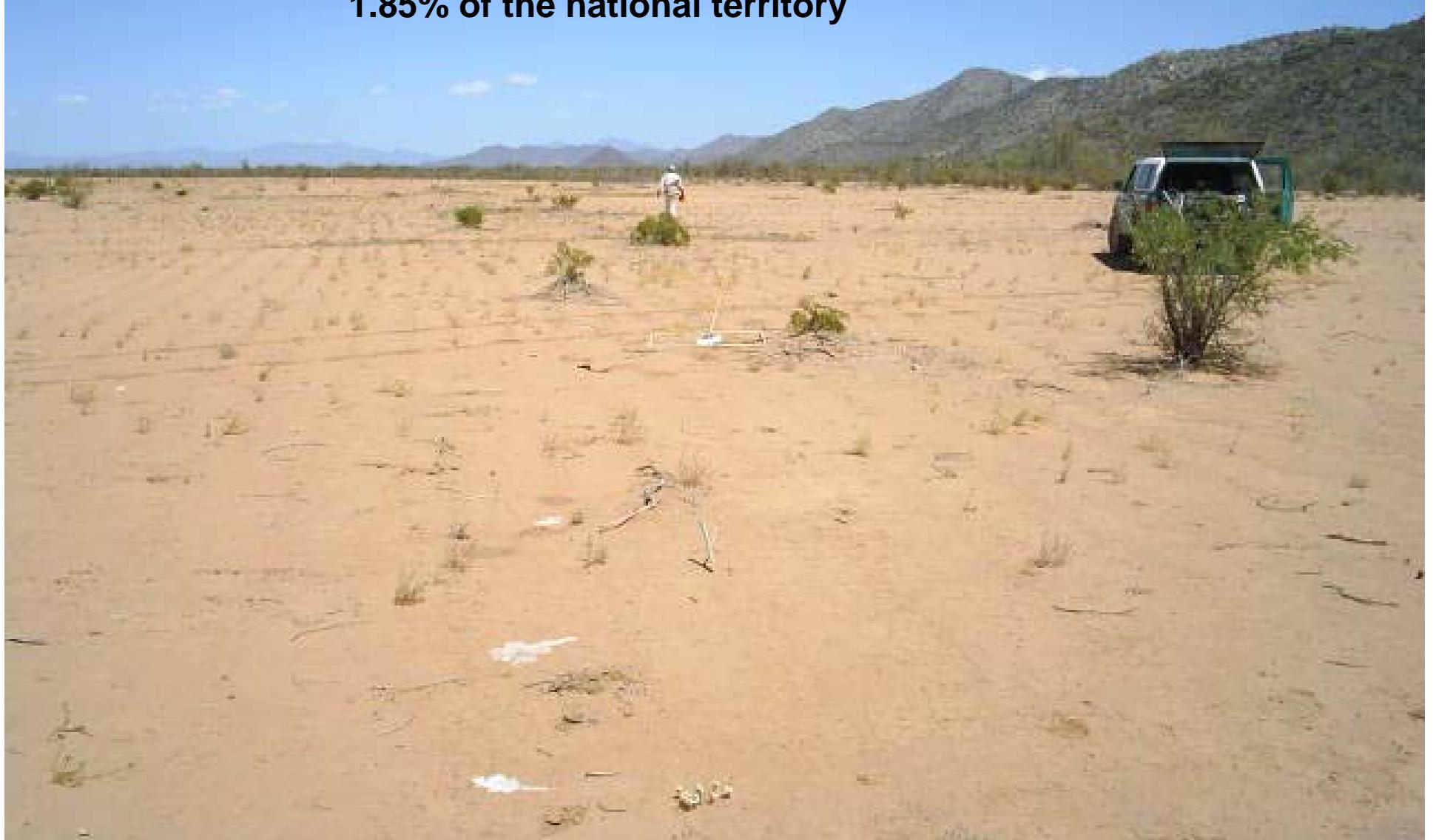
Coastal Plains





Arenosoles (Entisols)

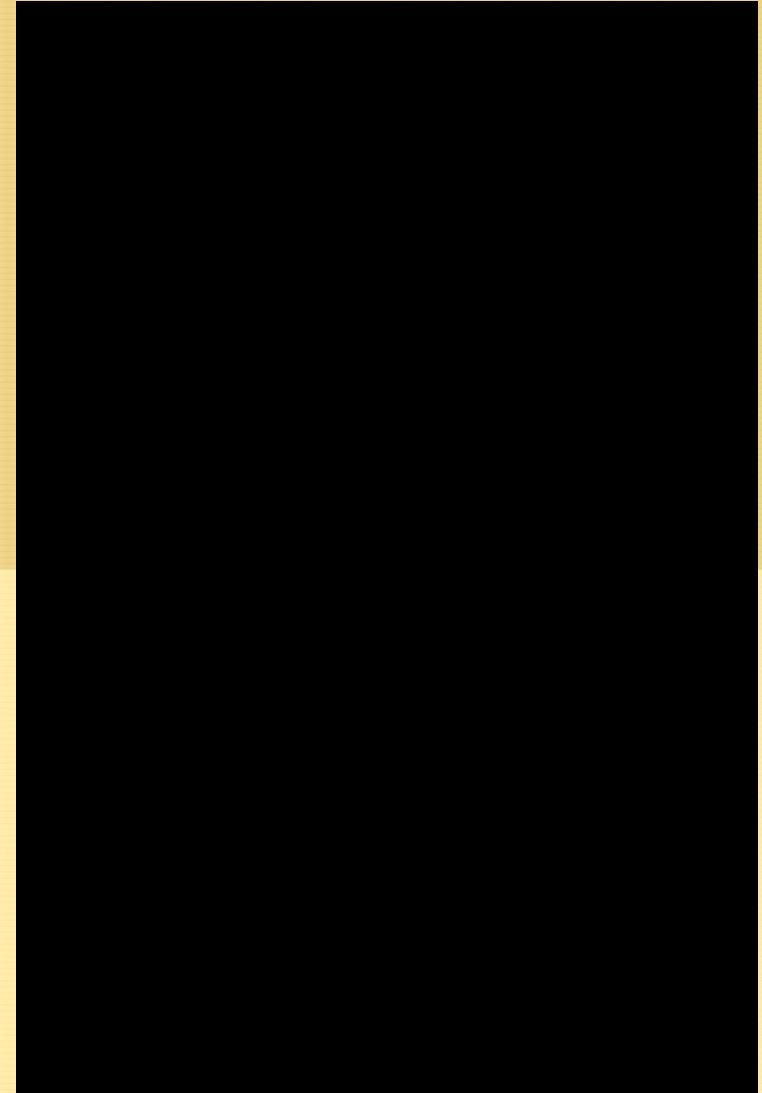
1.85% of the national territory





Vertisoles (Vertisols)

8.61% of
the
national
territory



Southern Mexico





0.64%
of
the
national
territory

Acrisoles (Ultisols) y Nitisoles



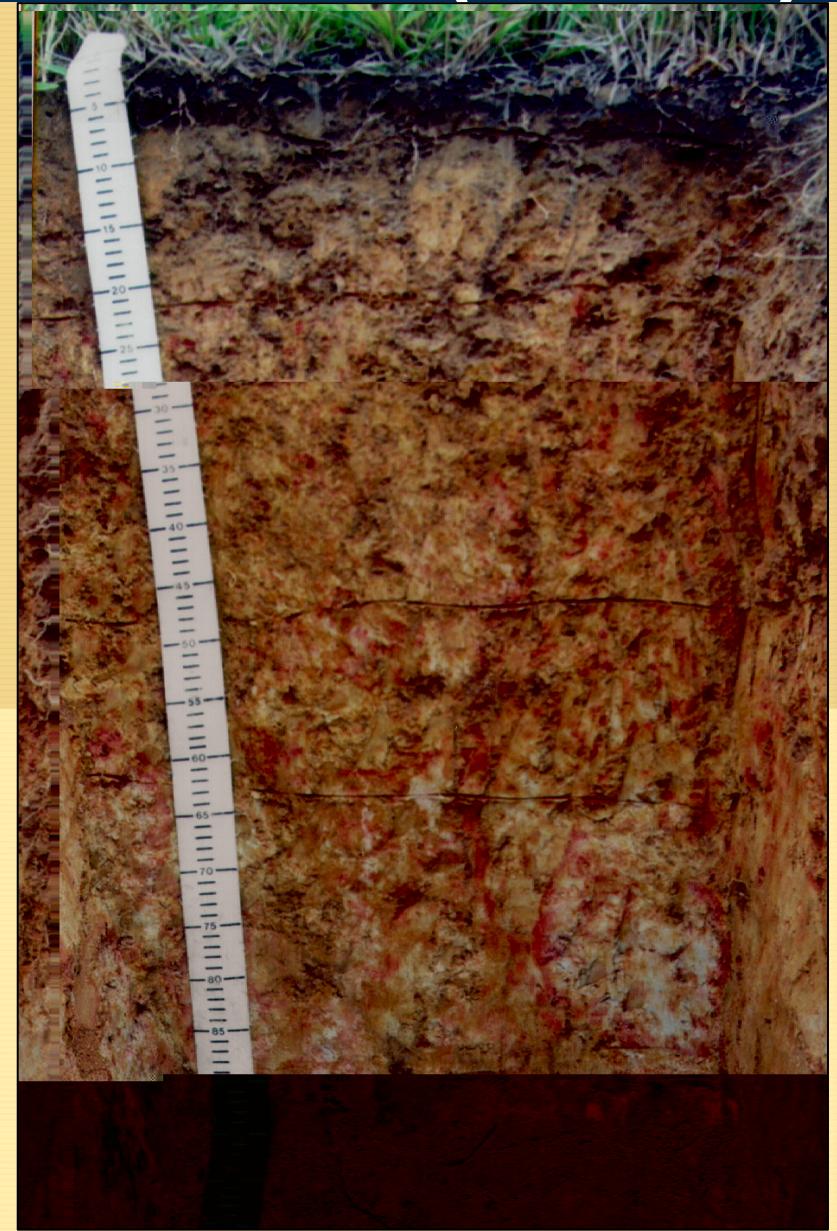


Stagnosoles (Aquic Conditions)



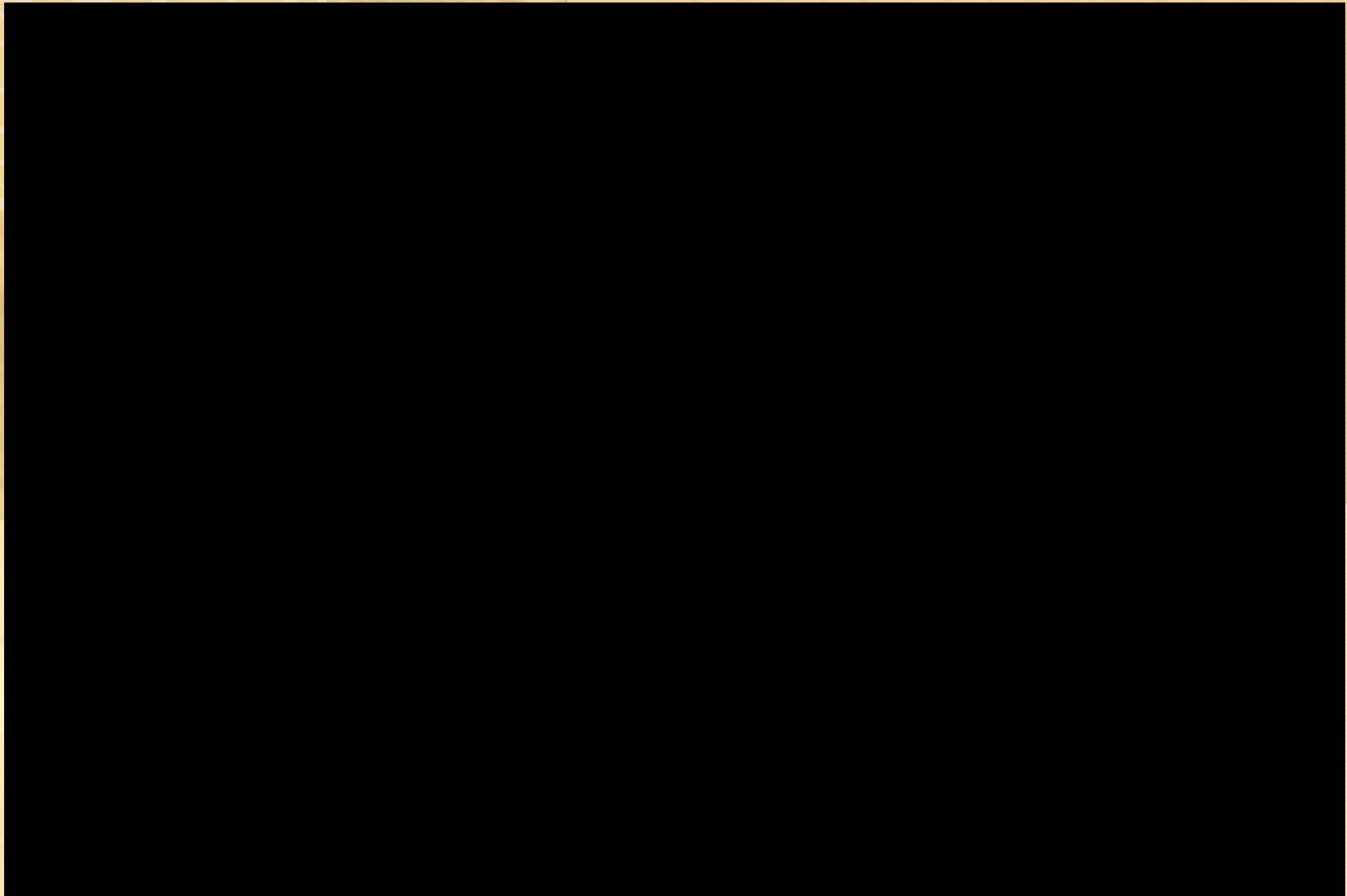


Ferralsoles y Plintosoles (Oxisols)





Antrosoles (Anthropogenic Soils)





Crisoles (Gelisols)





CATALONIA COOPERATIVE SOIL SURVEY PROJECT



CATALONIA, SPAIN

Area:

- 3.210.667 ha
- 7.930.372 acres

PHYSIOGRAPHY

Pyrenees mountain

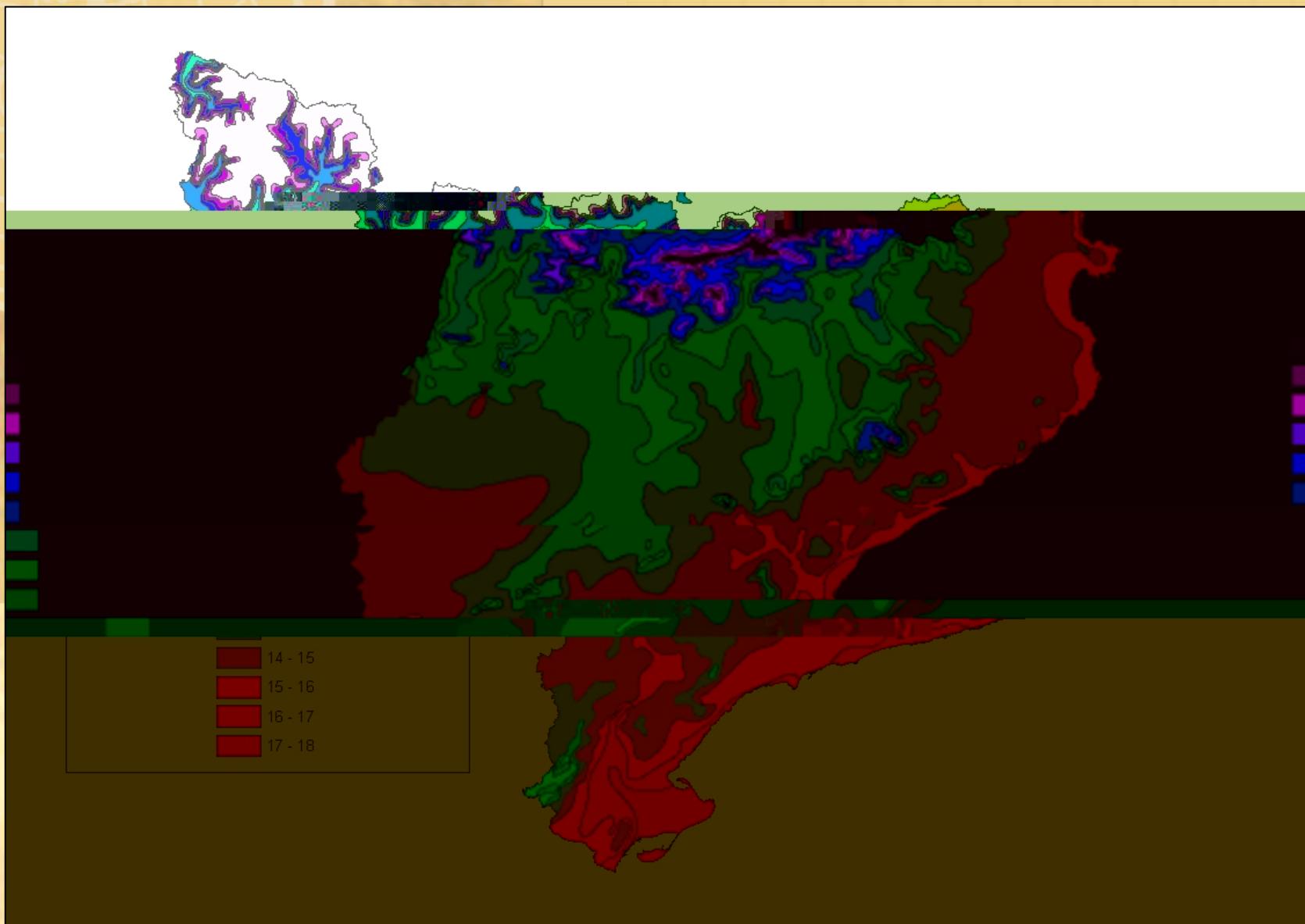
Catalan coastal ranges

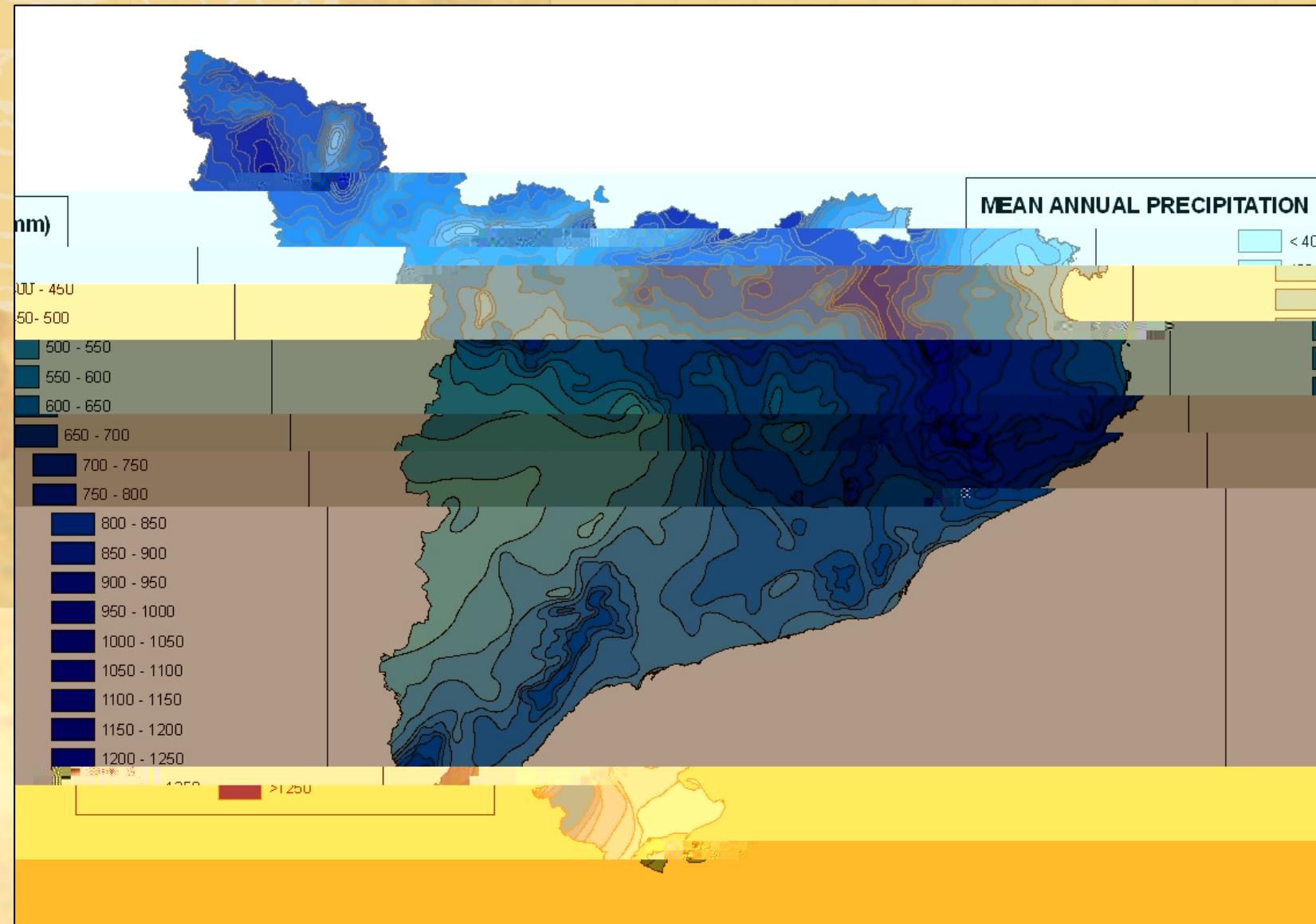
Ebro basin



Land Use:

- Forestry: 60%
- Agriculture: 29%
- Urban: 6%
- Miscellaneous: 5%

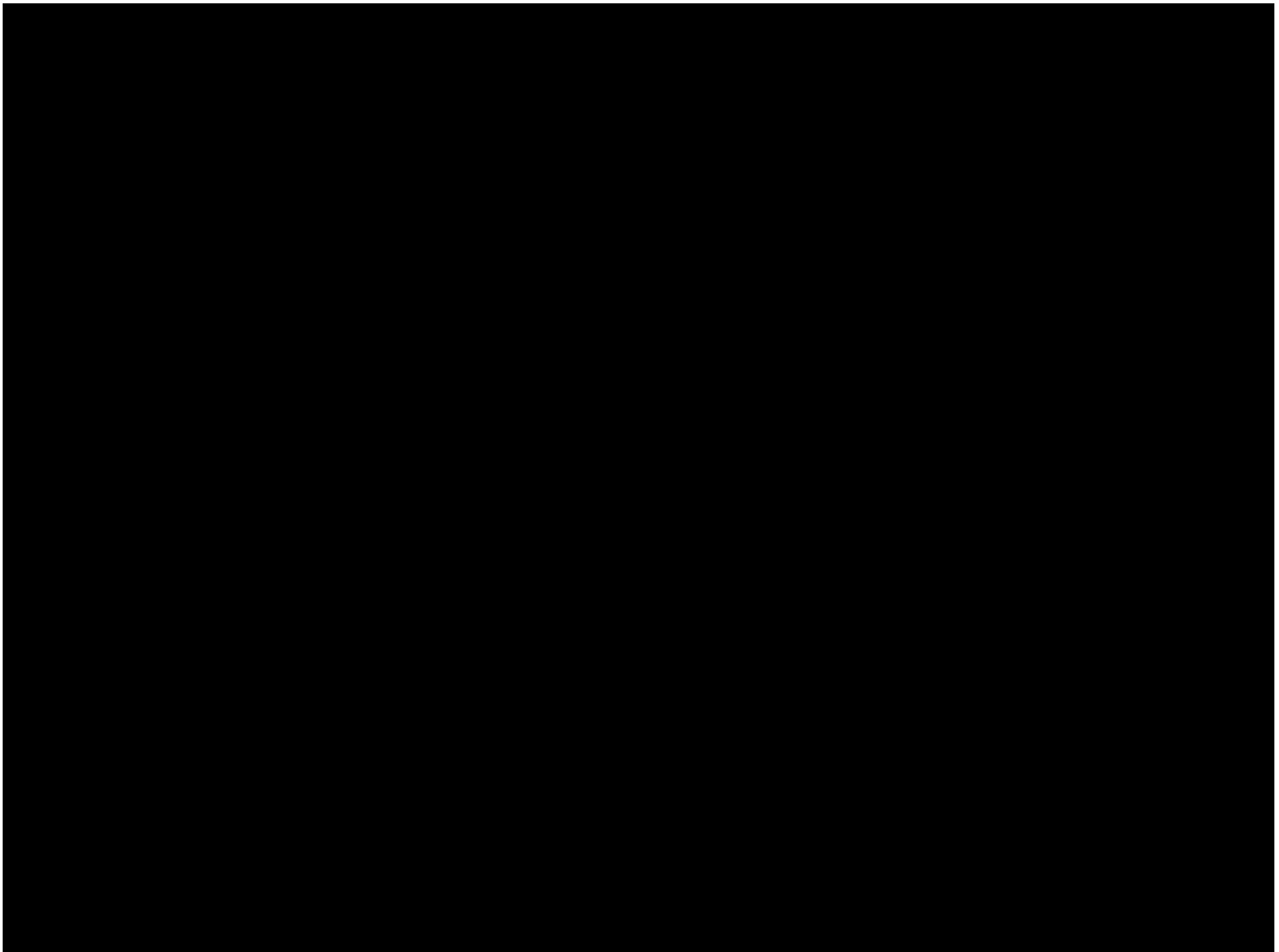




CATALONIA COOPERATIVE SOIL SURVEY PROJECT

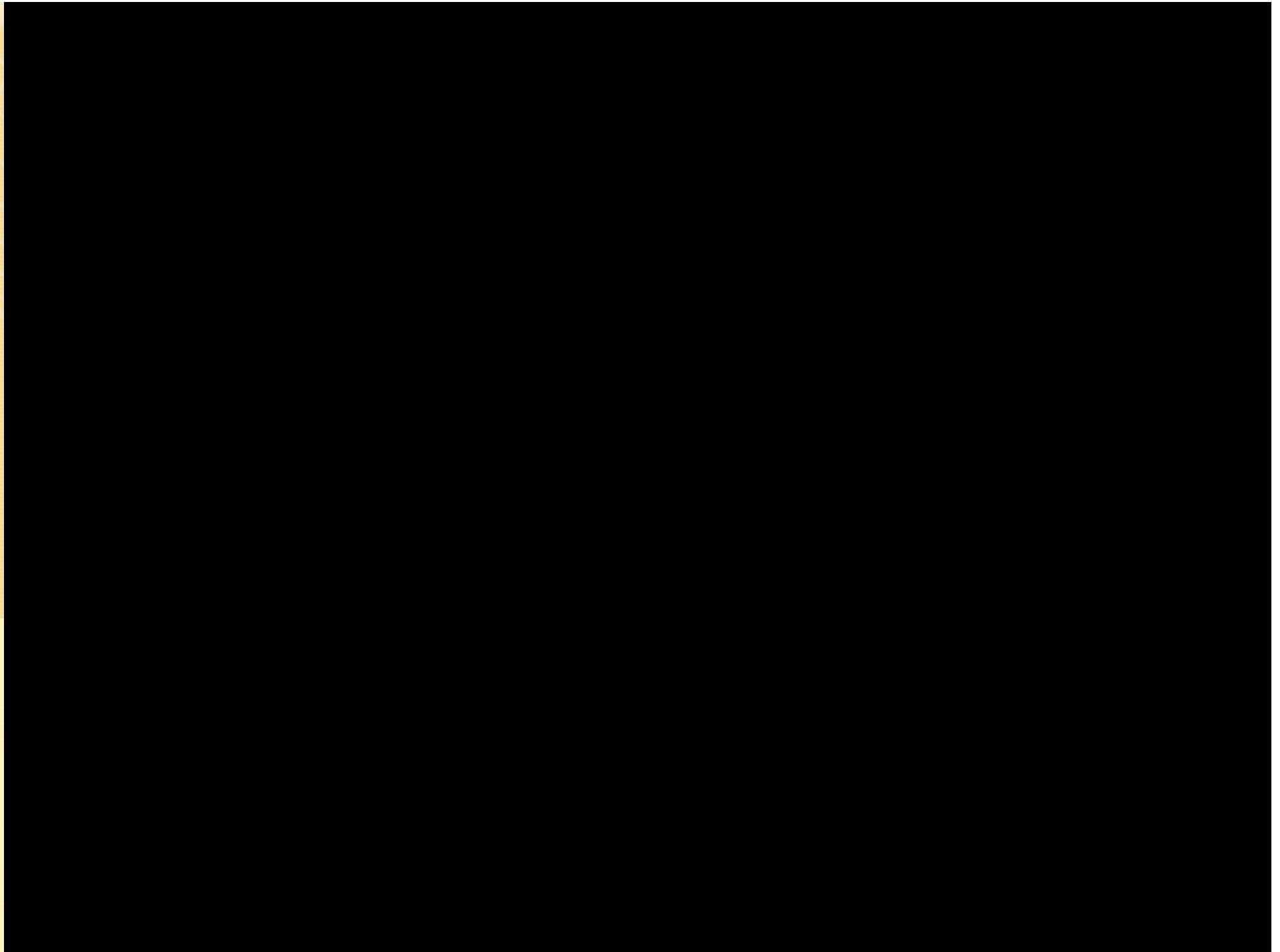
Project Objectives:

- **Soil Mapping of Catalonia**
 - 1:25,000
 - 1:250,000
- **Soil Database Development (attributes dataset)**
 - Threats to Soil - soil erosion, salinization, desertification, decline in organic matter, sealing, compaction, soil protection, etc.
- **Soil Information System (spatial dataset)**









Bench Terraces

